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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/583,523	05/31/2000	Jac-Hung Ycom	678-496(P9206	2503
7590 04/06/2004			EXAMINER	
Paul J Farrell Esq Dilworth & Barrese 333 Earle Ovington Blvd Uniondale, NY 11553			NGUYEN, STEVEN H D	
			ART UNIT	-PAPER NUMBER
			2665	12

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/583,523

Applicant(s)

YEOM ET AL.

Examiner

Steven HD Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 27-41 is/are pending in the application.
- 4a) Of the above claim(s) 27-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22, 40 and 41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4-5 and 11</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 23-26 canceled from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group. Election was made **without** traverse in Paper No. 10.
2. Claims 27-39 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II-V, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 10.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

As claim 41, A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to Hyatt is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor.

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4. Claims 2-7 and 9-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As claim 2, “the gated transmission controller of the mobile station **transmits the uplink** dedicated control channel signal in the gated mode at **a fixed gating rate on the downlink** and at **a changed gating rate on the uplink**” is vague and indefinite because it’s unclear what the recite is constituted for. Please clarify so the meter and boundary of the claim can be determined.

As claim 3, “the gated transmission controller of the mobile station **transmits the uplink** dedicated control channel signal in the gated mode **at a fixed gating rate on the uplink and at a changed gating rate on the downlink**” is vague and indefinite because it’s unclear what the recite is constituted for. Please clarify so the meter and boundary of the claim can be determined.

As claims 4-5, “the gated transmission controller of the base station **transmits the downlink** dedicated control channel signal in the gated mode at **a fixed gating rate on the downlink** and at **a changed gating rate on the uplink**” is vague and indefinite because it’s unclear what the recite is constituted for. Please clarify so the meter and boundary of the claim can be determined.

As claims 6-7, “the gated transmission controller of the base station **transmits the downlink** dedicated control channel signal in the gated mode **at a fixed gating rate on the uplink and at a changed gating rate on the downlink**” is vague and indefinite because it’s

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unclear what the recite is constituted for. Please clarify so the meter and boundary of the claim can be determined.

As claim 9, “the uplink dedicated control signal is transmitted in the gated mode **at a fixed gating rate on the downlink** and at a changed gating rate on the uplink in the uplink dedicated control channel signal transmitting step” is vague and indefinite because it’s unclear what the recite is constituted for. Please clarify so the meter and boundary of the claim can be determined.

As claims 15-16, “downlink dedicated control signal is transmitted in the gated mode at a fixed gating rate on the downlink and **at a changed gating rate on the uplink in the downlink** dedicated control channel signal transmitting step ” is vague and indefinite because it’s unclear what the recite is constituted for. Please clarify so the meter and boundary of the claim can be determined.

As claim 17-18, “the downlink dedicated control signal is transmitted in the gated mode **at a fixed gating rate on the uplink** and at a changed gating rate on the downlink in the downlink dedicated control channel signal transmitting step” is vague and indefinite because it’s unclear what the recite is constituted for. Please clarify so the meter and boundary of the claim can be determined.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 40-41 are rejected under 35 U.S.C. 102(a) as being anticipated by Hamalainen (WO 98/36508).

Hamalainen discloses a CDMA system comprising a gating controller for transmitting data at a forwarding gating rate different from the reverse gating rate in a gated mode (Figs 3-4 and page 7, lines 3 to page 8, lines 31, a DTX controller for performing transmitting data at forwarding gating rate different from the reverse gating rate in asymmetric way).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
9. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamalainen (WO 98/36508) in view of Shin-Yokohama (TSG-RAN).

Regarding claims 1-22, Hamalainen discloses (Figs 1-8 and Pages 1-11) a CDMA system which comprises a mobile station having a gated transmission controller for controlling an uplink channel signal in a gated mode according to transmission of an uplink gating rate (a mobile includes a DTX controller for performing a DTX mode “gated mode” on a reverse channel in according the uplink rate; Fig 3; see page 7, lines 3-20); and a base station having a gated transmission controller for controlling transmission of a downlink channel signal in a gated mode according to a downlink gating rate different from the uplink gating rate (a base station includes a DTX controller for performing a DTX mode on the forward channel according to the downlink rate different from the uplink rate; Fig 4, see page 7, lines 21 to page 8, lines 31 and See Abstract, Asymmetric rate between the mobile and base station); the gated transmission controller of the mobile station transmits the uplink channel signal in the gated mode at a fixed gating rate on the downlink and at a changed gating rate on the uplink (Fig 4, the data transmits on the downlink channel at basic rate “1” and uplink is transmitted at lower rate); the uplink channel signal in the gated mode at a fixed gating rate on the uplink and at a changed gating rate on the downlink (Fig 3, the data transmits on the uplink channel at basic rate “1” and downlink is transmitted at lower rate); the gated transmission controller of the base station transmits the downlink dedicated control channel signal in the gated mode at a fixed gating rate on the downlink and at a changed gating rate on the uplink (Fig 4, the base station transmits at a fixed rate at downlink and uplink at less rate in asymmetric way); the downlink dedicated control channel signal in the gated mode at a fixed gating rate on the uplink and at a changed gating rate on the downlink (Fig 3, the base station transmits at fixed rate of uplink and a changed gated at the downlink in asymmetric way). However, Hamalainen does not discloses a gated

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transmission controller in a base station for performing a gated mode in the forward dedicated control channel and a gated transmission controller of a mobile for performing a gated mode in the reverse dedicated control channel. However, in the same field of endeavor, Shin-Yokohama discloses a method and system for performing a discontinuous mode in the uplink/downlink dedicated control channel (Pages 1-3) and gating rate for downlink/uplink are 1 or 1/2 (Fig 3-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a dedicated control channel on the uplink/downlink in CDMA system as disclosed by Shin-Yokohama into Hamalainen's CDMA system. The motivation would have been to maintain synchronization between the devices during the discontinuous mode.

10. Claims 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanerva (USP 5793744).

Kanerva discloses a CDMA system comprising a gating controller (L2R/RLP is used to perform a discontinuous mode for the mobile or base station, Fig 2, Ref 62-63 and 64-65) for transmitting data at a forwarding gating rate. Kanerva does not fully disclose the forward channel rate is different from the reverse channel rate. However, Kanerva discloses discontinuous mode operates independently for the uplink and downlink channel because L2R/RLP determines how many channels which the device needs to allocate for transmitting the data over the air "read on rate of the uplink or downlink, so the rate of uplink and downlink are different from each other"; See col. 6, lines 32-46 and col. 10, lines 34 to col. 11, lines 10. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide a dynamic transmission rate system based on demand.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lomp (USP 5991329) discloses a method and system for adjusting the transmission power of the forward and reverse channel.

Butler (USP 6545989) discloses a method and system for transmitting gating in a wireless communication system.

Chen (USP 6373823) discloses a method and system for controlling transmission power in transmission gated communication system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (703) 308-8848. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (703) 308-6602. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Steven HD Nguyen
Primary Examiner
Art Unit 2665
4/02/04